

REMARKS

Applicants respectfully request reconsideration of the rejection of the claims in view of the claim amendments as well as the remarks set forth below. Claims 1-22 remain in the application. Claims 1, 9, and 17 are currently amended. Claims 2-8, 10-16, and 18-22 were previously presented.

35 U.S.C. §103

Claims 1, 3, 5-9, 11, 13-17, 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Webster et al., in view of Beck et al. Under 35 U.S.C. § 103, the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to be obvious in light of the teachings of the references (MPEP § 706.02(j)).

The applicants respectfully traverse the rejection and submit the following arguments for consideration by the examiner. Amended claim 1 recites, inter alia, a "digital radio frequency (RF) transceiver circuit, comprising . . . circuitry that is adapted to select between a transmitter input signal and a receiver input signal . . . a filter, the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal . . . and circuitry that alternatively receives the filtered transmitter signal or the filtered receiver signal and produces a modulated output and a demodulated output" (emphasis added). Support for the amendment may be found on page 6 lines 16-21, page 8 lines 19-29 and in FIG. 2. The claimed "the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal" is an important aspect of claim 1. The background of the invention discusses the desire to reduce the complexity associated with the circuitry for modulating and demodulating signals (page 2 lines 25-28). Further, the use of the "the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal" element of claim 1 conserves power, operates at a lower frequency, and reduces hardware (page 6 lines 21-27). The applicants propose that neither Webster nor Beck, taken individually or in combination, show or suggest at least the "the filter being adapted to

receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal“ element of claim 1.

Webster appears to be directed at a system for receiving and transmitting single carrier signals, including single carrier signals received and transmitted in conjunction with multi-carrier signals. Webster appears to process the transmitted signals and the received signals in separate circuits, including filtering the received signals in a filter circuit 219 and filtering the transmitted signals in a separate filter 719 (page 5, paragraph 0043 and page 7, paragraph 0054). In contrast, claim 1 includes “the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal “. Webster does not appear to show or suggest “the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal “. Therefore, Webster does not show or suggest at least the “the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal “ element of claim 1.

Beck appears to be directed at a system, including a transmitter and receiver circuit, for measuring channel response characteristics. The Beck receiver includes a set of individual filters that each filter a separate received signal to produce a series of channel estimates (page 4, paragraph 0041). In contrast, claim 1 includes “the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal “. Beck, like Webster, does not appear to show or suggest “the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal “. Indeed, the Beck transmitter appears to be completely separate from the Beck receiver and does not appear to include or discuss a set of filters at all. Therefore, Beck does not overcome the deficiencies in Webster, nor does Beck show or suggest at least the “the filter being adapted to receive both the transmitter input signal and the receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal “ element of claim 1.

As a result, neither Webster, nor Beck, taken alone or together, show or suggest at least the “the filter being adapted to receive both the transmitter input signal and the

receiver input signal, the filter adapted to produce either a filtered transmitter signal or a filtered receiver signal “ element of claim 1. Therefore it is respectfully proposed that the rejection of claim 1 under 35 U.S.C. § 103(a) is overcome in accordance with the above remarks and notice to that effect is earnestly solicited.

Dependent claims 3 and 5-8, being dependent on and further limiting independent claim 1, should be allowable for that reason as well as the additional recitations that they contain. Therefore it is respectfully proposed that the rejection of claims 2-8 under 35 U.S.C. § 103(a) is overcome in accordance with the above remarks and notice to that effect is earnestly solicited.

Amended claim 9 has been amended to include limitations similar to the elements of claim 1 and should therefore be allowable for that reason as well as the additional recitations contained therein. Therefore it is respectfully proposed that the rejection of claim 9 under 35 U.S.C. § 103(a) is overcome in accordance with the above remarks and notice to that effect is earnestly solicited.

Dependent claims 11 and 13-16, being dependent on and further limiting claim 9, should be allowable for that reason as well as the additional recitations that they contain. Therefore it is respectfully proposed that the rejection of claims 10-16 under 35 U.S.C. § 103(a) is overcome in accordance with the above remarks and notice to that effect is earnestly solicited.

Amended claim 17 has been amended to include limitations similar to the elements of claim 1 and should therefore be allowable for that reason as well as the additional recitations contained therein. Therefore it is respectfully proposed that the rejection of claim 1 under 35 U.S.C. § 103(a) is overcome in accordance with the above remarks and notice to that effect is earnestly solicited.

Dependent claims 19-20, being dependent on and further limiting claim 17, should be allowable for that reason as well as the additional recitations that they contain. Therefore it is respectfully proposed that the rejection of claims 18-20 under 35 U.S.C. § 103(a) is overcome in accordance with the above remarks and notice to that effect is earnestly solicited.

Allowable Subject Matter

Applicants respectfully note that claims 2, 4, 10, 12, and 18 were deemed to be allowable if rewritten in independent form including the limitations of the base claim and any intervening claims. Applicants also respectfully note that claims 21 and 22 are allowed.

Conclusion

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicants' agent at (317) 587-4027, so that a mutually convenient date and time for a telephonic interview may be scheduled.

No additional fee is believed due in regard to the present amendment. However, if an additional fee is due, please charge the fee to Deposit Account 07-0832.

Respectfully submitted,

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